

PROJECT TITLE : ANALYTICAL INVESTIGATION  
PERIOD COVERED : MARCH - APRIL 16, 1981  
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#### Organic Acids by GC

Reaction parameters for the derivatization of carboxylic acids into their ethylesters (1) are now fixed. Recovery and reproducibility for acid standard mixtures and standard mixtures added to fermented tobacco extracts are presently being investigated.

#### Total Phenols in Tobacco Smoke : Method Modification

In order to analyse total phenols in the smoke of some experimental cigarettes the following modifications have been made to the PM Analytical Method S-5A (2):

- 1) Predistillation of the methanolic extract of the Cambridge filter pad in a basic medium (elimination of neutral and basic interferences) prior to steam distillation of the phenols in an acidic medium.
- 2) Modification of the flow chart on the analytical module of the Technicon instrument.

No significant difference between the two methods has been found (Table 1).

#### Routine Analyses

- (GC)<sup>2</sup> analyses of 40 triacetin used in our European subsidiaries for the specification group (3).

RECOVERY TESTTABLE 1

	$\mu\text{g}$ phenol added $100\text{ml}^{-1}$	$\mu\text{g}$ phenol found $100\text{ml}^{-1}$	recovery	$\mu\text{g}$ cig.
With predistillation in	0	113		43.37
basic medium	25	140	108%	
	50	167	108%	
	75	200	116%	
Without predistillation	0	127		49.4
	25	151	96%	
	50	180	110%	
	75	211	117%	

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- Phosphate and sulfate (10) for QC, Process Development and Biotechnology.
- Amino acids (50) for Biotechnology (Project SAVOURY).

#### REFERENCES

- (1) Lecoultre-E., PME Monthly Report, February 1981.
- (2) Baker, Handy, PM Analytical Method Number S-5A, April 1973.
- (3) Oral request from Bel-T. to Lecoultre E. April 10, 1981.

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ETL/jig/APRIL 21 1981

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